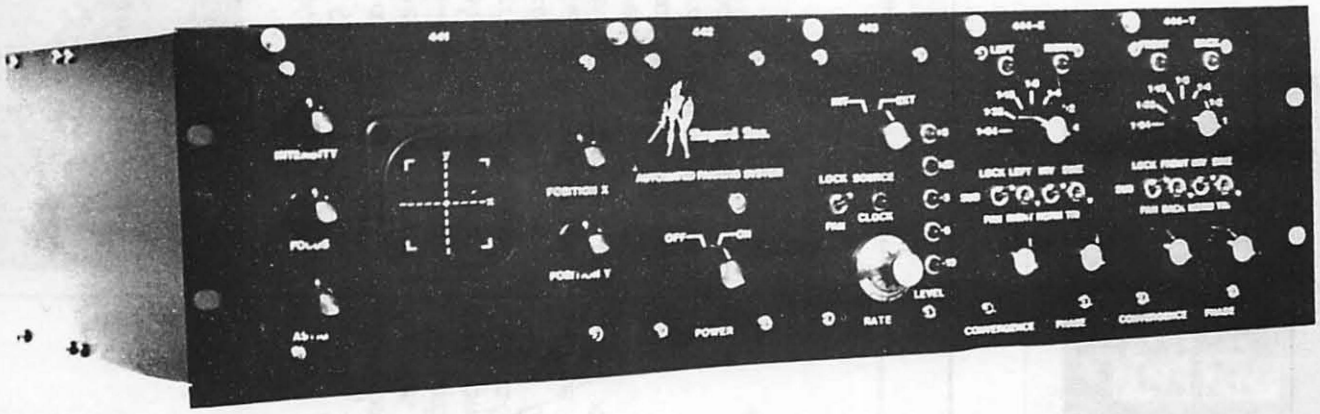


ASGARD MODEL 440 AUTOMATED PANNING SYSTEM

The Asgard Model 440 is a highbred Voltage Control device of unprecedented versitility. Although unequaled as a Location Modulator, the 440 also serves as the ideal Voltage Controller for studio effects device synchronization, monitoring, and control.

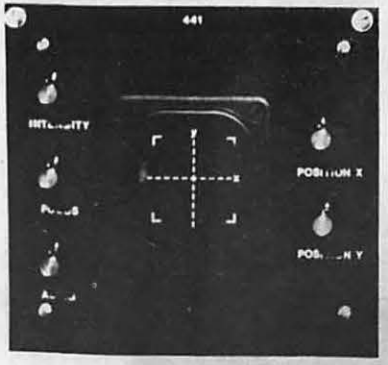
Specifications :

Gain	Unity ± 1dB
Frequency Response	20Hz - 20KHz ± 1dB
Common Mode Rejection Ratio	60dB or better
Input Impedance	600 ohms Balanced Line (Active)
Output Impedance	operative into 600 ohms or higher
Signal/Noise Ratio	-80dB or better
Total Harmonic Distortion	less than .1%, 20Hz - 20KHz Typically .05%
Oscillator Speed	Fundamental : 2Hz - 10Hz Post-Frequency Divider : .03Hz - 10Hz
Maximum Signal Level	+15dBm
Control Voltage Range	-15 to +15 Volts(other ranges optional)
Power Requirements	117 VAC, 50-60Hz, 32 Watts dissipation
Dimensions	5¼"H x 19"W x 14"D

All specifications subject to change without notice.

Warranty : One year, parts and labor.

ASGARD INC. 5 Stillwater Ave. / Providence, Rhode Island 02908 (401) 831-4484



The 441 Module measures 5.2"H x 5.6"W x 10"D and houses a custom cathode ray tube (P7 phosphor ; Purplish-blue fluorescence Yellowish-green component) and related controls and circuitry.

Due to its long trace persistence, changes in the convergence and phase of the patterns produced can be visually monitored and compared in real time.

All power supply needs within the Model 440 are provided for by the 442 Module.

System on/off switch and amber L.E.D. "on" indicator make up the 442's faceplate utilities.

The 442 Module measures 5.2"H x 2.8"W x 10"D.

The 443 Module serves as the "Master" module for the Model 440. Herein is contained an L.F.O. (Low Frequency Oscillator), a six-stage frequency divider, and an audio pre-amplifier.

Utilities include a ten turn potentiometer for precision control of L.F.O. speed, an L.E.D. indicator for speed (int. or ext.), an int./ext. L.F.O. select switch, an L.E.D. array headroom indicator, and a Pan/Lock switch for disengaging the oscillator.

Measurements : 5.2"H x 2.8"W x 10"D.

The 444 Modules are identical to each other except for their perspective parameters of control. The 444x Module controls all motion Left to Right, while the 444y Module controls all motion Front to Back. The composit of these two controllers is indicated by the C.R.T. trace on the 441 Module.

A seven position switch on each module for selection of the six frequency divisions and the fundamental L.F.O. speed (bused from the 443 Module) is provided in conjunction with two L.E.D.'s (post-frequency divider) indicating individual module status (left/right for x ; front/back for y)

Four mode switches on each of the 444 Modules determine :

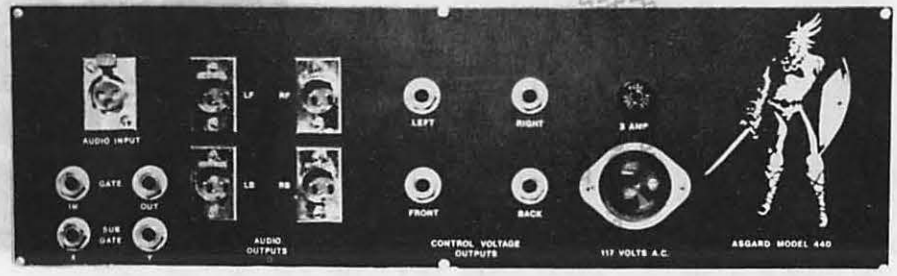
a) L.F.O. Select (lock/sub/pan)
b) Lock Select (left/right for x ; front/back for y)
c) Phase (normal/invert 180°)
d) Waveform Select (sine/triangle)

Two continuously variable controls, one for "convergence" and one for "phase" are located directly below the mode switches.

The convergence control operates in conjunction with the waveform select switch. When this control is in the extreme counterclockwise position, the control waveform for that module will be a square wave. As the convergence control is turned clockwise, the square wave will converge towards either a sine wave on a triangle wave (whichever mode is selected).

The phase control is a single stage, frequency dependent phase shifter. Resulting time delay variations allow for a wide variety of patterns that would otherwise require multiple control oscillators.

Measurements : 5.2"H x 2.8"W x 10"D



Rear Panal